



Department of Energy

Richland Operations Office
P.O. Box 550
Richland, Washington 99352

Incoming:9400840

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94-RPS-124

FEB 15 1994

Mr. A. W. Conklin, Head
Air Emissions and Defense Waste Section
Division of Radiation Protection
State of Washington Department of Health
Airdustrial Park Building 5, LE-13
Olympia, Washington 98504-0095

Dear Mr. Conklin:

REQUEST FOR CONCURRENCE FROM THE STATE OF WASHINGTON DEPARTMENT OF HEALTH FOR
PHASE I OF PROJECT W-320, TANK 241-C-106 SLUICING

Enclosed please find a request for concurrence for commencement of Phase I of
Project W-320, Tank 241-C-106 Sluicing. Air permitting for this project has
been previously discussed with you and your staff on December 9, 1993. At
that meeting, phased permitting options were discussed. This letter is a
request for concurrence that the activities described for Phase I do not
constitute a source of new emissions to the air and therefore permitting is
not required for this phase.

Approximately 6,000 gallons of water are added each month to Tank 241-C-106
for evaporative cooling of the tank waste. Sluicing the waste to
Tank 241-AY-102 will allow the water additions to cease, and will allow
Tank 241-C-106 to be placed in a safe, interim stabilized condition.

Because the heat generated in Tank 241-C-106 is a safety issue, the schedule
for the project has been accelerated, necessitating phased permitting from the
State of Washington Department of Health. This acceleration will allow the
addition of water to a single shell tank (241-C-106) to cease at an earlier
time.

Should you have any questions regarding the enclosed, please contact me or
Mr. S. D. Stites of my staff on 376-8566.

Sincerely,

James D. Bauer, Program Manager
Office of Environmental Assurance,
Permits, and Policy

EAP:SDS

Enclosure

cc w/encl:
J. P. Harris III, WHC
J. J. Luke, WHC



Phase I Activities
Project W-320, Tank 241-C-106 Sluicing

Tank 241-C-106 (106-C) is a single shell tank located in the 200 East Area of the Hanford Site and contains waste that generates heat at an approximate rate of 110,000 British Thermal Units per hour. In order to protect the tank shell from excessive heat, a ventilation system was added, and water additions initiated in 1971. Currently, approximately 6,000 gallons are added each month to Tank 106-C. The evaporative cooling provided by the added water maintains the tank temperature below the maximum allowable temperature.

Project W-320, Tank 241-C-106 Sluicing, is intended to mobilize and remove the heat-generating sludge in Tank 106-C to allow the water additions to cease, and to allow the tank to be placed in a safe, interim stabilized condition. The heat generation of the waste in Tank 106-C has been identified as a key safety issue at the Hanford Site. Tank-to-tank sluicing, an existing proven technology, will provide the earliest possible closure of this safety issue. The waste will be transferred to Tank 241-AY-102 (102-AY), which is a double shell tank with greater allowable temperature limits than Tank 106-C.

The air permitting for this project was discussed with your staff on December 9, 1993. At that meeting, phased permitting options were discussed. This letter is a request for concurrence that the activities described do not constitute a source of new emissions to the air and therefore permitting is not required for this phase. The existing exhaust ventilating Tank 106-C will remain in operation during these activities.

Activities included in Phase I:

- Removal of existing equipment. This includes removal of two pumps in Tank 106-C and one pump from Tank 102-AY. Pump removal will take place using existing routine precautions for removal of equipment from actively ventilated tanks. The pump removal is required to allow sluicing equipment to be installed in Phase II.
- Earthwork. This includes the clearing, scraping, grading, and digging required to support installation of the new equipment in the two tank farms and installation of temporary office trailers and a construction staging area on the North exterior of the C-Tank Farm. This activity is normally considered outside the bounds of initiating construction, as agreed with your agency previously, but is included in this letter for completeness.
- Modification of Pits. Pump pits in both Tanks 106-C and 102-AY will require minor modifications to facilitate sluicing activities. These modifications will not be intrusive and will not involve breaking tank containment.
- Transfer Piping. New transfer piping is required to comply with the Resource Conservation and Recovery Act and to allow the waste to be transferred in the most direct route possible, minimizing radiation exposure to personnel. New piping will be added within the fenceline of both the 241-C and 241-AY tank farms, as well as between the two farms. There will be no points of potential emissions along any of the new piping system.
- Instrumentation, Electrical, and Control Room. A new control room will be installed, and instrumentation and electrical power will be expanded in the tank farms to allow adequate control of the sluicing operations. Tank containment will not be broken during the installation of these systems, until Phase II.

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As can be seen by this list, the activities proposed for Phase I do not represent a potential new pathway for air emissions, even during operation of the sluicing equipment. However, because these activities are integral to the overall project of sluicing Tank 106-C, your concurrence that the activities do not constitute construction of a new source of air emissions is requested.

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9173275-0996

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

Addressee

Correspondence No.

J. D. Bauer, RL
(C. E. Sowa, WHC)

A. W. Conklin, DOH

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Subject: REQUEST FOR CONCURRENCE FROM THE STATE OF WASHINGTON DEPARTMENT OF
HEALTH FOR PHASE I OF PROJECT W-320, TANK 241-C-106 SLUICING

INTERNAL DISTRIBUTION

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		J. H. Dunkirk	B3-06	
		K. B. Ferlan	S4-55	
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		J. M. Henderson	S4-55	
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		J. J. Luke	H6-25	
		H. E. McGuire, Level 1	B3-63	
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		Project Files	R1-28	
		EPIC	H6-08	
		CES/File/LB	H6-25	

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